for your consideration...
suggestions and reflections on Teaching and Learning
CTL Number 12 February 1992

The Guided Discussion

The teacher-led discussion is used in college classrooms to help students develop a deeper understanding of course material and practice basic thinking skills. This type of discussion fits easily into lecture courses and is often employed in separate discussion sections for large classes.

Although teachers appreciate the importance of class discussions for achieving higher-order objectives, they are often frustrated by students' apparent reluctance or inability to participate. Instructors also report that, even when discussions take place, the intellectual level of the interchange is often disappointingly low. These problems, and most other common difficulties with guided discussions, can be overcome if three conditions are met. First, the teacher must try to change students' beliefs and attitudes about their role in the classroom. Second, both the teacher and her students must prepare for discussions. Third, the teacher needs to use facilitating techniques that enhance students' willingness to participate and, at the same time, train them in logical approaches to analysis.

Addressing Beliefs

One of the greatest barriers to class discussion is the students' expectation that professors are supposed to lecture and students are supposed to sit passively and take notes. This pattern is reinforced time and again in courses in which the instructor, consciously or unconsciously, shares this belief. When discussions do take place in these courses, usually only a small percentage of students participate, and students quickly learn that they can take a free ride on the contributions of a few of their peers. Moreover, the trend toward larger classes reinforces this norm of passivity because of the anonymity conferred by membership in a large group.

If you want students to participate in discussions, you must try to establish a new behavioral norm before the old one asserts itself. This change requires that you address student expectations on the very first day of class and, in subsequent classes, consistently encourage and demand their participation. On the first day of class, talk with students about your expectation that they will all contribute to class discussions, then demonstrate what you mean by conducting a discussion in which you try to engage everyone.

Teachers often ask if they should call on students or just use volunteers. It is true that students don't like to be called on when they are not prepared (or if they are shy), but their anxiety will be reduced if you tell them why it is important for them to participate. Explain that you will only question them on material they have prepared, or ask for their opinions.

A discussion during the first class can be based on ideas or opinions that you can expect students to bring to the course. For example, a professor who teaches Western Civilization asks students to share their favorite stories from history books or high school courses they have had. He uses their stories as the basis for a discussion of the issues that are significant for historians and how those might differ from the ones they remember. This interchange provides an opportunity for every student to contribute something and also gives the teacher a quick estimate of the level of historical knowledge that students bring to the course.

Preparing for Discussions

One of the characteristics of the Socratic dialogues is that the great philosopher seemed to know where the discussion was going and how he was going to get the student there. Similarly, we should prepare guided discussions by identifying outcomes and developing questions that enable students to achieve these goals.

Discussions should have a point, a learning objective related to some important aspect of the course. Generally, discussion objectives fall into three categories: developing higher-order intellectual skills (e.g., problem-solving and critical thinking), applying these skills to

issues in the course, and changing beliefs and attitudes. For example, in an Economics course, the teacher may wish students to demonstrate the application of supply and demand principles to new situations. The discussion objectives might include the following:

- Identify the economic principles that explain a current event (increase in coffee prices).
- Predict the probable outcome of alternative actions involving these economic principles (e.g., fixing the coffee price at the old level by law).
- Distinguish between probable and improbable outcomes of the alternative actions.

Once the instructional purpose is clear, the teacher can develop questions to facilitate student thinking in the discussion. It is useful to think about discussion questions in terms of a three-level hierarchy: knowledge, application, and evaluation. Knowledge-level questions simply ask the student to recall factual information (such as data, definitions, or procedures). Application-level questions require the student to use rules, procedures, methods, principles, or theories in novel situations. Evaluation-level questions demand quantitative and qualitative judgment based on criteria supplied by the student or by the teacher. Figure 1 illustrates questions at each level of the hierarchy. These categories are not prescriptive, since many questions may span levels or even fall between them; they simply provide a convenient method for checking on the level and kind of questions you plan to use.

Effective teachers plan discussions as thoroughly as they plan their lectures, by writing questions and developing a questioning strategy to achieve the objectives. Some excellent questions will probably occur to you in the heat of a discussion, but it is unwise to rely on chance alone to provide an effective framework for the exercise. If the discussion veers off into areas that are interesting but irrelevant to the point of the discussion, the teacher can bring it back on track by returning to the prepared questions. On the other hand, if students wish to explore important ideas that go beyond the planned objectives, the instructor can allow the discussion to follow this path (and re-write the objective before the course is taught again). Planning your questions in advance does not mean that you are bound to a particular goal; it allows you to be flexible when flexibility is warranted. In practice, of course, teachers also ask many unplanned questions to facilitate discussion and focus student thinking, and these kinds of questions are discussed below under the dynamics of classroom interaction.

Preparing your students for discussion is just as important as your own preparation, since their readiness to respond to questions provides the energy and momentum for the discussion. Discussions often focus on course readings, but if students fail to do the reading (or fail to understand it), they will not be able to respond. Most undergraduates do try to keep up with the reading for their courses, but often they have difficulty discriminating between relevant and irrelevant material. If you examine their books and class notes, you will find they tend to underline or highlight entire pages of text, and it is not unusual to find virtually every word underlined. The impossibility of remembering every detail may keep them from comprehending the basic point of the reading. It can also result in bizarre interpretations of the text, since they may remember bits and pieces that don't fit into a rational whole. If the reading requirement for a course is especially heavy, they may simply stop reading rather than risk further confusion. By helping students learn to read for understanding, you prepare them to take part in discussions.

Teachers have used a number of different strategies to achieve this result, but one of the most common is the use of study guide questions. Figure 2 illustrates a set of study questions designed to prepare students for a discussion in Russian History. (Note how these items reflect the three-level hierarchy suggested earlier.) Other instructors assign short, reflective (graded) papers for each discussion section so students will have well-developed opinions and insights on the discussion topic of the day. A few teachers even treat study guide questions as homework assignments, making them part of the participation grade for the class. In smaller classes, particularly in upper-division courses, this step may not be necessary to insure that students prepare responses to the questions, especially if the same (or related) questions appear on the examinations. As a

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Figure 1

Examples of Questions for a Discussion

Knowledge questions

- Did Descartes believe in God?
- Who invented the cotton gin?
- What is the difference between a sodium atom and a sodium ion?

Application questions

- How would you use Cartesian logic to prove the existence of God?
- How would you explain the effect the invention of the cotton gin had on slavery in the South?
- How do you know how many times to use l'Hopital's rule in a given (differential calculus) problem?

Evaluation questions

- How consistent is the logic Descartes uses to prove the existence of God? If it is consistent, does this mean that it is correct?
- What do you think might have been the result if the cotton gin had been invented 20 years earlier than it was?
- In this case study, what would you do about amortizing equipment costs if you were the chief accountant?

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bonus, this technique neatly links the readings to classwork and to the tests, so students rarely complain that they don't know what to study.

Figure 2

Study Questions for a Discussion in Russian History

1. What is an icon? What role, according to Benz, do icons play in Orthodox theology and piety?

2. How does the Primary Chronicle (contained in Riha) explain Russia's conversion to Christianity?

3. Does the explanation it offers strike you as convincing? If not, why not? If so, think again.

4. Why do you think the writing of the Primary Chronicle presents the Christianization of Russia the way it does?

5. What insights into the writing of history can you derive from the Christianization episode as well as other episodes contained in the excerpts from the Primary Chronicle assigned for last week and this? Or, to phrase the question somewhat differently, what pitfalls await the historian who wishes to read or write "true" or "accurate" history?

Classroom Dynamics

Careful planning and writing well-crafted questions will not guarantee good discussions; classroom dynamics are also important. We sometimes forget that, from the students' viewpoint, an instructor wields enormous power as judge and leader. Most undergraduates also see the teacher as the Ultimate Authority, who knows the Truth. If we don't counter these images effectively, they will hamper classroom interactions and make teacher-led discussions difficult and unprofitable. The best instructors try to create a classroom environment in which students feel they can attempt to answer difficult questions without courting the teacher's displeasure or the ridicule of their classmates. Laying out the ground rules for class discussion is one of the ways you can create an atmosphere of "friendly inquiry," but you must gently enforce the rules and follow them assiduously yourself. Typical guidelines for discussion might include the following:

- Everyone in class has both a right and an obligation to participate in discussions, and, if called upon, should try to respond.
- Always listen carefully, with an open mind, to the contributions of others.
- Ask for clarification when you don't understand a point someone has made.
- If you challenge others' ideas, do so with factual evidence and appropriate logic.
- If others challenge your ideas, be willing to change your mind if they demonstrate errors in your logic or use of the facts.
- Don't introduce irrelevant issues into the discussion.
- If others have made a point with which you agree, don't bother repeating it (unless you have something important to add).
- Be efficient in your discourse; make your points and then yield the floor to others.
- Above all, avoid ridicule and try to respect the beliefs of others, even if they differ from yours.

The best discussion leaders strive for a balance between demanding a high level of performance from students and supporting them in their struggles to achieve the goals you have set. This skill requires that you know your students' strengths and weaknesses so you can calibrate your questions to their needs at various points in the discourse. For example, some students need more encouragement and direction than others; some can usually be counted on to inject new ideas into a discussion, and a few are always ready to play devil's advocate. Asking easier questions of slower students can give them confidence and encourage them to try harder. Challenging top students with very difficult questions helps them develop even further.

If a student tells you that he is paralyzed by fear when called upon, you naturally would want to avoid directing questions to that student, but fortunately these cases are rare. More often, a student may try to dominate the discussion, possibly to the point of confrontation with the teacher. In such cases it is wise to meet with the student outside of class to remind her of the class rules for discussion.

Good discussion leaders are good listeners. They respond to all student contributions, both to reward participation and to verify their understanding of what the student said. They make few declarative statements during discussions and usually respond to student questions with other questions, using them as building blocks in the architecture of the discussion.

In these interactions the teacher uses various facilitating questions to prompt, clarify, and extend student contributions. Unlike the base questions for discussion that are planned ahead of time, facilitating questions are the product of transitory interchanges occurring in the midst of fast-moving discourse. Facilitating questions, part of the repertoire of every experienced discussion leader, fall into five groups: prompting, justification, clarification, extention, and redirection.

When a student's contribution is weak or incorrect, asking prompting questions will help him/her identify the weakness. If you suspect that a student doesn't understand why a contribution is incorrect (or correct), ask him/her to justify the answer. Poorly organized or incomplete responses can be made stronger by asking

clarification questions. All three of these non-punitive techniques help students modify poor or incomplete responses and, over time, become better thinkers.

Extension questions help students explore the implications of their responses. Typical extension questions ask for an elaboration of a response, for more detail or additional explanation. Asking several students the same question (redirection) distributes responsibility and usually provides a richer variety of responses. If the teacher follows redirection by asking students to respond to or evaluate each other's contributions, the focus will shift from teacher-student to student-student interaction.

At the end of a guided discussion it is important to verify that students have achieved the objectives for the exercise. Many teachers summarize the main points of the discussion and ask for questions. Some instructors ask students to write down one important point they learned; the instructor then calls on students at random to read their points. This method also provides an evaluation of the success of the discussion.

The dynamics of discussion-leading can only be mastered through practice, but observing an experienced leader in action is an excellent way to see how these techniques are applied in the classroom. When you are ready for feedback on your own technique, ask an experienced discussion leader to sit in on your class and make suggestions. You can also arrange with CTL to videotape your discussion and provide a confidential critique.

Addressing student expectations, preparing yourself and your students, and conducting discussions in a supportive and demanding way will greatly improve your chances for success in guided discussions. The teacher-led discussion is only a short step away from lecturing, since the instructor remains in control of the classroom process. However, teachers who have mastered this technique find it easier to move into other discussion methods that are less teacher-centered. If you are interested in learning more about guided discussions or other interactive techniques, please call CTL for an appointment with one of our consultants.

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Center for Teaching and Learning 919-966-1289
CB# 3470, 316 Wilson Library
Chapel Hill, NC 27599-3470